



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/516,670	03/01/2000	Kenichi Seino	9281-3582	3796
757 75	590 10/31/2005		EXAMINER	
BRINKS HOFER GILSON & LIONE			YE, LIN	
P.O. BOX 10395			ART UNIT	PAPER NUMBER
CHICAGO, IL	CHICAGO, IL 60610		2615	

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/516,670	SEINO ET AL.			
Office Action Summary	Examiner	Art Unit			
·	Lin Ye	2615			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	I. sely filed the mailing date of this communication. Of (35 U.S.C. § 133)			
Status					
Responsive to communication(s) filed on <u>30 Notest</u> This action is <b>FINAL</b> . 2b) ☑ This 3) ☐ Since this application is in condition for allowant closed in accordance with the practice under Expression in the practice of the prac	action is non-final. ice except for formal matters, pro				
Disposition of Claims					
4)  Claim(s) 2-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 2-20 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or					
Application Papers	•				
<ul> <li>9) The specification is objected to by the Examiner</li> <li>10) The drawing(s) filed on <u>01 March 2000</u> is/are: a Applicant may not request that any objection to the dependent drawing sheet(s) including the correction</li> <li>11) The oath or declaration is objected to by the Examiner</li> </ul>	(a) accepted or $(b)$ objected to drawing(s) be held in abeyance. See on is required if the drawing(s) is object.	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary ( Paper No(s)/Mail Dal 5)  Notice of Informal Pa				

Application/Control Number: 09/516,670

Art Unit: 2615

## Page 2

#### **DETAILED ACTION**

## Response to Arguments

- A request for continued examination under 37 CFR 1.114 filed on 11/30/04, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/30/04 has been entered.
- 2. Applicant's amendments with respect to claims 2-20 filed on 11/30/04 have been considered but are most in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 12, 4-8 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. U.S. Patent 6,433,836.

Referring to claim 12 (e.g., It should be noted that "NTSC video signals and PAL video signals" are referred as R, G, B video signals; and "high definition television transmission

color signals" are referred as Y, Pr and Pb video signals, see applicant's specification page 5. line 25 through page 6, line 2), the Suzuki reference discloses in Figure 1, a video signal processing circuit comprising: an input terminal (26) receiving high definition television transmission color signals (Y signal, R-Y as Pr color difference signal, and B-Y as Pb color difference signal), a contour-adjusting circuit (contour extracting circuit circuits 14 and adder 22, see Col. 1, lines 30-35) configured to receive the high definition television transmission color signals from the input terminal and peak the received signals for contour adjustment; an inverse matrix transforming circuit (matrix circuit 24) for separating R, G and B signals from the high definition television transmission color signals (e.g., matrix circuit 24 convert the adjusted Y signal, the R-Y and the B-Y to the R, G and B signals as shown in Figure 1); and an output terminal (28) outputting video signals that include contour-adjusted R,G and B signals. However, the Figure 1 of the Suzuki reference does not explicitly show the input terminal receiving NTSC video signals and PAL video signals (R, G, B video signals); and the contour-adjusting circuit configured to receive R, G, B video signals from the input terminal and peak the received signals for contour adjustment.

The Suzuki reference teaches in Figures 3 and 7, a video signal processing circuit comprising: an input terminal receiving NTSC video signals and PAL video signals (R, G, B video signals); and the contour-adjusting circuit (contour extraction 38, gain controller 40 and coefficient multiplication circuit 42, see Col. 2, lines 45-47) configured to receive R. G. B video signals from the input terminal and peak the received signals for contour adjustment. The Suzuki's Figures 1 and 3 are evidence that one of ordinary skill in the art at the time to see more advantages for a video signal processing circuit comprising a contour-adjusting

circuit has more flexible options to receive either R, G and G signals, or Y, Pr, Pb signals from the input terminal for contour adjustment (See Col. 3, lines 4-10). For that reason, it would have been obvious to one of ordinary skill in the art at the time to modify the video signal processing circuit of Suzuki for providing a contour-adjusting circuit to receive one of the NTSC video signals, PAL video signals and the high definition television transmission color signals from the input terminal and peak the received signals for contour adjustment as taught by Suzuki's Figures 1 and 3. It is also obvious to one of ordinary skill in the art at the time to see a selecting circuit that controls adjusted NTSC video signals and adjusted PAL signals (R, G and B signals) to bypass the inverse matrix transforming circuit, because inverse matrix transforming circuit is only used for converting Y, Pr, Pb signals back to R, G, B signals after the contour adjustment completed; since adjusted NTSC video signals and adjusted PAL signals are already R, G and B signals; and adjusted NTSC video signals and adjusted PAL signals don't need sent into the inverse transforming circuit.

Referring to claim 4, the Suzuki reference discloses all subject matter as discussed in respected to claim 12, and the Suzuki reference discloses an image monitor apparatus comprising a display device using a video signal processing circuit (contour emphasizing circuit, see Col. 1, lines 5-11).

Referring to claim 5, the Suzuki reference discloses all subject matter as discussed in respected to claim 12, and the Suzuki reference discloses wherein the contour-adjusting circuit further comprises at least on peaking circuit configured to peak either the R, G and B signals from video signals in one of a NTSC system and PAL system (See Figure 3) or only

the Y signal from transmission color signals in a high definition television system (See Figure 1).

Referring to claim 6, the Suzuki reference discloses all subject matter as discussed in respected to claim 5, and the Suzuki reference discloses wherein the at least one peaking circuit (circuits 38, 40, 42 and 34) receives as an input the R, G, or B signal from video signal from video signals in one of the NTSC system and the PAL system as shown in Figure 3.

Referring to claim 7, the Suzuki reference discloses all subject matter as discussed in respected to claim 5, and the Suzuki reference discloses wherein the one peaking circuit (22) receives as an input the Y signal from transmission color signals in the high definition television system as shown in Figure 1.

Referring to claim 8, the Suzuki reference discloses all subject matter as discussed in respected to claim 7, and the Suzuki reference discloses wherein the Pr signal (R-Y) and the Pb signal (B-Y) are directly inputted to the inverse matrix transforming circuit (24) as shown in Figure 1.

Referring to claim 13, the Suzuki reference discloses all subject matter as discussed in respected with same comments to claims 12, 5-8.

Referring to claim 14, the Suzuki reference discloses all subject matter as discussed in respected with same comments to claims 12, 5-8.

Referring to claim 15, the Suzuki reference discloses all subject matter as discussed in respected with same comments to claims 12, 5-8.

5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. U.S. Patent 6,433,836 in view of Harward U.S. Patent 4,928,181.

Referring to claims 2-3, the Suzuki reference discloses all subject matter as discussed in respected to claim 12, and the Suzuki reference discloses a display device (LCD) using a video signal processing circuit (contour emphasizing circuit, see Col. 1, lines 5-11). However, the Suzuki reference does not explicitly show the LCD is a viewfinder for a television camera.

The Harward reference teaches a television camera comprising a viewfinder which is a LCD; the edges of the images in the LCD are enhanced by video signal processing (See Col. 4, lines 44-65). The Harward reference is evidence that one of ordinary skill in the art at the time to see more advantages a display device (LCD) is a viewfinder for a television camera so that user can review the video images captured from TV camera in a live time easily. For that reason, it would have been obvious to one of ordinary skill in the art at the time to modify the display of the Suzuki as a commercial viewfinder device of the television camera taught by Harward.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al.
 U.S. Patent 6,433,836 in view of Schwartz U.S. Patent 3,980,819.

Referring to claims 9-10, the Suzuki reference discloses all subject matter as discussed in respected claims 12, 5-7, except the reference does not explicitly has a detail about the peaking circuit in the contour-adjusting circuit which includes at least one delay circuit, at

least one subtractor circuit and at least one adder circuit and appending circuit to form a peaked signal.

The Schwartz reference teaches in Figure 13, the edge enhancement system has a signal peaking circuit comprising delay circuit (delay line 74, 78), subtractor circuit (difference amplify 75, see Col. 9, lines 7-12) and adder circuit (adder 80, See Col. 9, lines 25-30). The Schwartz reference is an evidence that one of ordinary skill in the art at the time to see more advantages for the edge enhancement system has a signal peaking circuit which including such delay circuit, subtractor and adder for peaking the edge signal so that can improves the sharpness of television images and correcting display significantly (See Col. 3, lines 4-10). For that reason, it would have been obvious one of ordinary skill in the art at the time to modify the contour-adjusting circuit of the Suzuki for providing a peaking circuit in the contour-adjusting circuit which includes at least one delay circuit, at least one subtractor circuit and at least one adder circuit and appending circuit to form a peaked signal as taught by Schwartz.

7. Claims 11 and 16-20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. U.S. Patent 6,433,836 in view of Kobayashi et al. U.S. Patent 5,638,485.

Referring to claim 11, the Suzuki reference discloses all subject matter as discussed in respected claims 12 and 5, and the Suzuki reference discloses the contour adjustment is performed on R, G and B signals or only performed on Y signal, and the Pr signal and the Pb signal, in which the contour adjustment is not performed. However, the Suzuki reference

does not explicitly show the selecting circuit changes selection of switch for selecting with the type of input video signals such as NTSC/PAL or HDTV video signals.

The Kobayashi reference teaches in Figures 3, a video signal processing apparatus including a selecting circuit that changes selection of switch for selecting the type of input video signals (e,g., NTSC signal 3:4 or high definition television signal is 9:16, see Col. 1, lines 15-31) inputted into the input terminals (114 and 116, see Col. 3, lines 34-64). The Kobayashi reference is evidence that one of ordinary skill in the art at the time to see more advantages for a video signal processing system is not limited by the type of input video signals so that has more flexibility to process video signals in low cost and power consuming. For that reason, it would have been obvious one of ordinary skill in the art at the time to modify the video signal processing circuit of Suzuki for providing a selecting circuit for selecting with the type of input video signals such as NTSC/PAL or HDTV video signals as taught by Kobayashi.

Referring to claim 16, the Suzuki and Kobayashi references disclose all subject matter as discussed in respected with same comments to claims 11 and 14.

Referring to claim 17, the Suzuki and Kobayashi references disclose all subject matter as discussed in respected with to claim 16, and the Kobayashi reference discloses a plurality of selecting switches (118a-b and 120a-b) configured to be driven simultaneously by the selecting circuit.

Referring to claim 18, the Suzuki and Kobayashi references disclose all subject matter as discussed in respected with to claim 17, and the Kobayashi reference discloses wherein at least one selecting switch includes at least tow input terminals, a first input terminal (e.g.,

118b) configured to receive one of the NTSC video signals and the PAL video signals (NTSC/PAL signals with using 3:4 ratio) and a second input terminal (118a) configured to receive the high definition television transmission signals (HDTV signals with using 9:16 ratio).

Referring to claim 19, the Suzuki and Kobayashi references disclose all subject matter as discussed in respected with to claim 18, and the Kobayashi reference discloses wherein in accordance with the type of input signals, the selecting circuit drives the selecting switch (122, 124, 126, 128, 152) to connect one of the first input terminal and the second input terminal to an output terminal as shown in Figure 3.

Referring to claim 20, the Suzuki and Kobayashi references disclose all subject matter as discussed in respected with to claim 18, and the Kobayashi reference discloses wherein in response to one of the NTSC video signals and the PAL video signals, the selecting circuit (control circuit 156) drives the first input terminal of the selecting switch (118b) to be connected to the output terminal, and in response to the high definition television transmission signal, the selecting circuit (156) drives the second input terminal of the selecting switch (118b) to be connected to the output terminal as shown in Figure 3 (See Col. 3, lines 35-45).

#### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

Application/Control Number: 09/516,670

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lin Ye

Examiner

Art Unit 2615

October 20, 2005